

## ABSTRACT

In accordance with the present invention, a system for planarizing a substrate in fabricating semiconductor devices is provided. The system comprises at least two different types of polishing module which are arranged in an arbitrary sequence beginning with a first polishing module and ending with a last polishing module, means for transferring the substrate between the polishing modules, a load station, and an unload station. The load station is for loading the transferring means with the substrate prior to starting polishing at the first polishing module, and the unload station is for unloading the substrate from the transferring means after ending polishing at the last polishing module. A method for planarizing a substrate in fabricating semiconductor devices by using a polishing system is also provided. The system comprises at least two different types of polishing modules which are arranged in an arbitrary sequence beginning with a first polishing module and ending with a last polishing module, means for transferring the substrate, a load station, and an unload station. The method comprises the transferring means loads with the substrate at the load station prior to starting polishing at the first polishing module. Next, the substrate is sequentially polished and transferred in a sequence from the first polishing module to the last polishing module, and then the substrate is unloaded from the transferring means at the unload station after ending polishing at the last polishing module.

BLOOMFIELD 46602-12357 569320